Updating Existing Equipment to Support i-Vu® Touch Screen and ZS Sensors

At this time, Open controllers shipped from the factory have not been updated to include support for ZS sensors or the i-Vu® Touch Screen. Additionally, the applications in EquipmentBuilder have not been updated.

Field update of the controller(s) will be required in order to use i-Vu® Touch Screen and/or ZS sensors on select Open PIC products. The Open factory (PIC) products that have been updated to support i-Vu® Touch Screen and ZS Sensors are the following:

- 1. VVT Zone (OPN-VVTZC)
- 2. VVT Bypass (OPN-VVTBP)
- 3. VAVB1 (OPN-VAVB1)
- 4. VAVB3 (OPN-VAVB3)
- 5. RTU Open (OPN-RTUM)

It will be necessary to download the ZIP file for each product that is to be updated. Each ZIP file will contain the new equipment, view, touch and driver file required to update the controller to support the i-Vu Touch and ZS sensor.

Additionally, if you are to use an i-Vu Touch or ZS sensors on field applied controllers, then it will be necessary to upgrade the driver to the applicable Ver 6.0 driver for that controller. Download the ZIP file with the Field Applied Controller drivers. NOTE: The UPC Open currently does <u>not</u> fully support the i-Vu Touch and ZS sensors due to compatibility issues with the Carrier microblocks. It is therefore recommended that the UPC Open not be used with these products.

It is important to be aware that if you are planning to use i-Vu Touch and ZS Sensors, then the front end must be an i-Vu server 6.0 and Field Assistant 6.0 must be used as the installer tool.

NOTE: Existing controllers need to be field updated to support i-Vu Touch and ZS Sensors - it is not possible to update it using an updated SAL file. The exception to this is any VVT Zone, VAVB1 or VAVB3 controller that has already be field updated to support ZS sensors. A controller that has been updated can easily be identified as the file names will include *iv6* in the file name of the equipment and view as shown below for the VVT Zone Controller files:



Once they have been updated, then any subsequent updates to those versions will be supported through the standard SAL library update procedure outlined in application note OAPN006.

NOTE: If updating an RTU Open, then you <u>must</u> access the Service Configuration and set the Unit Type configuration appropriately. The updated Control Program for the RTU Open defaults to LC WeatherExpert.

Local Access: Connected	<pre>(</pre>	Graph	nics	Properti	es	Schedules	/ т	Frends	Reports	1-1	Technician Tool Only	3?
(20) RTU Open	Contro	ol Program	I/O Points	Alarm Sou	ces Trend So	irces Netwo	ork Points	BACnet Points	Rnet	Points	: RTU Open	
	Name	RTU Open	(#00 16420	02 1) Control P	aram: opp. ctum		191091	Instance: 1				2
· · · · · ·	Control	Inc Control	(#eq_10429	02_1) Control P	room:	2_100-3_00_20	131021	instance.			Equipment status: Red	
醒 Zs Sensor Upgrade	Control	ler. Controll	ler zu (devid	:e1642902) Add	ress.						Equipment status, Red	
(13) VVT Zone	Last Pa	rameter Char	nge: Wed Oct 3	0 12:11:29 EDT 20	13							
(14) VVI Bypass	Notes:											
(15) VVI Zone												
(20) RTU Open												
23 Sensor binder												
	▶ S	tatus										
	▼ C	onfiguratio	on									
	N	Unit Care	G									a series and
	-	Unit Curi	nguration									and the second
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		Alarm Co	nfiguration									
	-	Service (Configuratio	n								3
		Unit Type		(BMS)	/ I C WeatherEx	pert Default Valu	ie:	I C Weather	xnert v	Lock at v	alue: Heat / Cool 🔻	
		Economize	r Exists	(BBV)	No	Default Valu	Ie'	Heat / Cool		Lock at v	alue: No *	
		VED Input		(88)/	2-10 vdc	Default Valu	10.	LC WeatherEx	pert	Lockaty	alue: 0.10 vdc v	
				(0.01)	100 %	Default Valu		HP 0/B Ctrl HP Y1/W1 Ctrl		Lockaty		
		Max VFD U	utput	(BAV)	100 %			40.00		Lookatv	alus. 0	
		Min VFD Ou	utput	(BAV)	40 %	Detault Valu	le:	40.00		Lock at v	alue: U	
		Dehum Min	VFD Output	(BAV)	100 %	Default Valu	ie:	100.00		Lock at v	alue: 0	

Updating Controllers to support i-Vu Touch and ZS Sensors

NOTE: The instructions below were created using screen captures from Field Assistant. If doing the upgrade using i-Vu server then some of the screens may look slightly different however the steps all are the same.

- 1. Download the applicable ZIP file(s) for the product(s) that are to be updated into a specific folder.
- 2. Navigate to the folder and extract the contents of the ZIP file(s).
- 3. Launch i-Vu 6.0 or Field Assistant 6.0
- 4. Upload the controllers into Field Assistant
- 5. Right click on the controller to be updated and select Driver Properties

Local Access: Connected
· VVT Zone
Zs Sensor Upgrade
(13) VVT Zc Configure
(14) VVT By Driver Properties
(15) VVT Zc Module Status
(20) RTU O _I
Airflow Config
Delete Controller
Delete Selected
Reload Control Program
Copy Control Program Properties
Copy Path

- 6. Select the *Update* tab
- 7. Under the **Controller** section, click the Add button and navigate to the folder where you extracted the contents of the ZIP file. Select the .**driver** file for this controller.

Then select which controllers will be updated – just this one controller, all similar controllers on this network or all similar controllers in the system. In the example below only the single controller will be updated.

	Close	Properties	Ala	rms / I
 Driver Device Notification Classes Calendars Common Alarms Specific Events Custom Translation Tabl Switches, Jumpers, Optic 	Close Update To avoid losing controller Controller I Model Name: VVT Zone Address :1 Module Status	Properties	Alar Settings solve all mismatches	in affected controllers befor
	Driver Version: drv This controller All controller Add Upd Screen File	vytopen_3-04-119 er only s on this network that u s in the system that use ate Delete U	se same driver versio e same driver version nused	n

8. The driver listed should now reflect a Version 6.00.082 driver specific to the currently selected product; in this case it is a VVT Zone Controller.

Note: Your selection of which controllers to update the driver will also determine which controllers you will be able to update the control program and graphics for. Only controllers that have been updated to the Ver 6.0 driver will be upgradable later when the Control Program and View file are updated.



- 9. If the selected controller is a Field Applied Controller, then click Close to close the Driver Properties windows and skip to step 15.
- 10. Following the same steps, under the *Screen File* section, update the .*touch* file so that you now have a Version 6 Touch file.



- 11. Click Close to close the Driver Properties window.
- 12. Right click on the same controller and now select Configure

Local Access: Connected	Graphics
(20) RTU Open : VVT Zone	
Zs Sensor Upgrade	
(13) VVT Zc Configure	
(14) VVT By Driver Properties	
(15) WT Zc Module Status	
(20) RTU O _I	
Airflow Config	
Delete Controller	
Delete Selected	
Reload Control Program	
Copy Control Program Properties	
Copy Path	

13. Under the *Control Programs* section, click the *Add New* button and navigate to the folder where you extracted the contents of the ZIP file. Select the *.equipment* file for this controller.

Then select which controllers will be updated (if applicable) – just this one controller, all similar controllers on this network or all similar controllers in the system.

: WT Zone	
Display Name: VVT Zone	Controller: Controller 1
Control Program: vvt_zn_iv6-3_06_20131	017
To avoid losing controller properties, pleas Control Programs Control Program: vvt_zone-2_2013040 Edit Existing Add New	e resolve all mismatches in affected controllers before making any file changes.
Views Graphic Page: vvt_zone-2_20130401	
Tip: You can create replacement graphi	ic pages using ViewBuilder.

14. Repeat step 10 for the .view file by selecting the Add New button under the Views section and navigating to the folder where you extracted the contents of the ZIP file.

Then select which controllers will be updated (if applicable) – just this one controller, all similar controllers on the network or all similar controllers in the system.

Both the **Control Programs** and **Views** sections should now have a file that includes *iv6* in the name as shown below.

VVT Zone
Display Name: VVT Zone Controller: Controller 13
Control Program: vvt_zone-2_20100408
o avoid losing controller properties, please resolve all mismatches in affected controllers before making any file changes.
Control Programs
Control Program: vvt_zn_iv6-2_06_20140403 -
Change this control program only.
Change for all control programs of this type on this network only.
Change for all control programs of this type.
Edit Existing Add New Update Delete Unused
views
Graphic Page: vvt_zn_iv6-2_06_20140403.view •
Change for this control program only.
Change for all control programs of this type on this network only.
Change for all control programs of this type.
Edit Existing Add New Delete Unused
Tip: You can create replacement graphic pages using ViewBuilder.

- 15. Click Close to close the Configure window.
- 16. There should now be a banner indicating that the controller's programming has changed. If this is not displayed, then press the F5 key to refresh the page.

Local Access: Connected	/ 두	Graphics	Properties		Schedules		Trends	1-	Reports	/-/Technician Tool On
(20) RTU Open	: VVT	Zone								
	The	e controller's programi	ning has cha	ng		e do		all co		update programs in
I Zs Sensor Upgrade ■ (13) VVT Zone	° <mark>the</mark> Dov	e controller. mioad								
(14) VVT Bypass					VV	T Zor	ne			

- 17. If you have additional controllers that are to be upgraded then return to step 5 and select the next controller to upgrade.
- 18. When all of the required controllers have been upgraded, then navigate to the top of the tree or to the router below which the upgraded controllers reside. Select the controller(s) that need to be downloaded, or click the Select all checkbox if all the controllers are to be downloaded.
- 19. Click the Download button to start the download process.

Local Access: Connected	/ 🖛 /	Devices	Rep	orts 🗸			Ţ	echnician Tool On
(20) RTU Open		Manage	Advanced	: Zs Sensor Up	ograde			
	Find D	evices (1)					Add Control Pi	ogram Daylight Saving
 Zs Sensor Upgrade (13) VVT Zone 	All Con	tent - Download Al	I Content 👻 Uplo	pad	Show C	Control Programs	4 Uploaded Cor	Time Settings
(14) VVT Bypass		Name	Status	Address	IP Address	Controllers	Model	Views included in d
(15) VVT Zone (20) DTU Or er	(1)	RTU Open	· ·	20	20	0	RTU Open	rtu_open-2_20120123
(20) RTO Open	(1)	VVT Bypass	1	14	14	0	VVT Bypass	vvt_bypass-20100406
	•	VVT Zone	Download All Cont	tent 13	13	0	VVT Zone	vvt_zone-2_20100408
	•	VVT Zone	1	15	15	0	VVT Zone	vvt_zone-2_20100408
			To find a	a router's controlle	rs, select the	router in the t	ree.	

- 20. Wait for the download to complete. Do **NOT** close Field Assistant as that will stop the download.
- 21. When the download has completed, open Field Assistant Launcher and stop the connection.

fa Field Assistant Launcher	
	Help
System Name zs_sensor_upgrade	
Source Files Import Export	
System Time Zone USA (GMT -05:00) Eastern	7
Communications	
C 161.145.81.239 - Intel(R) 82567LM Gigabit Network Connection 💌	
COM3 If your port is not listed, relaunch this application with USB-L connected.	ation
System Status: Started	
License expires on 09/30/2015	

22. If there is an i-Vu server on the site and the Field Assistant is configured to **Optimize download** for **Open PIC controllers** then it will be necessary to export the source files from Field Assistant and import them to the server.

Local Access: Connected	C Dev	vices	Report	s /v/	
(20) RTU Open	Manage		Advanced	: Zs Sensor Upgrade	
c Zs Sensor Upgrade	BACnet/IP network: 1600	Server Device Id:	169998 🗸 Opti	mize download for Open PIC controllers	1
(13) VVT Zone	Communications Time-out	(in milliseconds): 40	00 🗸 Inclu	ude graphics in Open programmable con	troller download
(14) VVT Bypass	Communication Retries: 3				

a. To export the source files, from the Field Assistant Launcher, select *Export* Source Files as shown below.

	fa Fie	ld Assistant Lau	ncher				x
							Help
	:	System Name	zs_sensor_testing		•	+ -	
		Source Files	Import	Export			
	Syste	em Time Zone	USA	•	(GMT -05:	:00) Eastern	•
	Comr	munications					
	\odot	161.145.81.17	'1 - Broadcom NetXti	eme 57xx Gig	gabit Contr	oller 👻	
	۲	COM1	 If your port with USB-L 	is not listed, connected.	, relaunch	this applicatio	n
1							
			System Statu	s: Not Start	ed		
			License expire	es on 09/30/2	2015		

- b. Log into the i-Vu server with installer level access.
- c. Navigate to the System Option \rightarrow General tab

Ay Settings	Operators	General	Security	Update	Daylight Sav	Add-ons	
Logo							
Select a week	of logs to revi	ew: 2013-10-	27 - Down	load			
Mana	gement To	ol					
Make a backuj	p or change s	erver setup 🚺	lanagement T	Tool			
Time							
Date/Time:	10/29/20	013 🗍 14	54 57		Require	s an immedia	te server reboot.
Region:	USA	👻 Tin	neZone: (GMT	T -05:00) East	ern 👻 Require	s an immedia	te server reboot.
Time Format:	24-hour cloc	k 🔻					
Date Format:	mm/dd/yy	-					
Enable tin	ne synchroniz:	ation of control	lers daily at	4 00 00	Time Sync		
▶ Alarms							
> Trends							
▼ Source	Files						
	Files: Ex		Import	These includ		es driver view	correct files and
An Source	EX			These includ	e control progra	m, unver, view	, screen mes, and
report desi	gn mes. Impo	nt will not oven	write existing t	nes.			

- d. Open the Source Files section and select Import.
- e. Upload the updated controllers into the i-Vu server. Since the server now already has the updated files in the database, the upload process should go relatively quickly depending upon how many controllers were actually upgraded.
- 23. That completes the controller update process. The updated controllers now support i-Vu Touch and ZS sensors.